

CLAIM LISTING

Claims 1-22 (Canceled).

Claim 23 (Previously Presented): A method for cancer treatment comprising the step of administering at least one oligonucleotide or its active derivative to a subject, wherein said at least one oligonucleotide or its active derivative inhibits the formation of metastases in said subject.

Claim 24 (Previously Presented): The method of claim 23, wherein said oligonucleotide is an antisense oligonucleotide which inhibits the synthesis of proteins involved in the formation of metastases.

Claim 25 (Previously Presented): The method of claim 23, wherein said oligonucleotide is an antisense oligonucleotide which inhibits the production of TGF-beta1, TGF-beta2, TGF-beta3, cell-cell adhesion molecules (CAMs), integrins, selectines, metalloproteases (MMPs), their tissue inhibitors (TIMPs) and/or interleukin 10.

Claim 26 (Previously Presented): The method of claim 23, wherein said oligonucleotide is identified in the sequence listing under SEQ ID NO:1 to 68, 69 to 107 or is identified in examples 19 to 24.

Claim 27 (Previously Presented): The method of claim 23, wherein said oligonucleotide is identified in the sequence listing under SEQ ID NO. 1, 5, 6, 8, 9, 14, 15, 16, 28, 29, 30, 34, 35, 36, 40, and 42.

Claim 28 (Previously Presented): The method of claim 23, wherein said cancer is selected from the group consisting of bile duct carcinoma, bladder carcinoma, brain tumor, breast cancer, bronchogenic carcinoma, carcinoma of the kidney, cervical cancer, choriocarcinoma, cystadenocarcinoma, cervical carcinoma, colon carcinoma, colorectal carcinoma, embrional carcinoma, endometrial cancer, epithelial carcinoma, esophageal cancer, gallbladder cancer,

gastric cancer, head and neck cancer, hepatocellular cancer, liver carcinoma, lung carcinoma, medullary carcinoma, non-small-cell bronchogenic/lung carcinoma, ovarian cancer, pancreas carcinoma, papillary carcinoma, papillary adenocarcinoma, prostate cancer, small intestine carcinoma, rectal cancer, renal cell carcinoma, sebaceous gland carcinoma, skin cancer, small-cell bronchogenic/lung carcinoma, soft tissue cancer, squamous cell carcinoma, testicular carcinoma, uterine cancer, acoustic neuroma, neurofibromas, trachomas, and pyogenic granulomas; pre-malignant tumors, blastoma, Ewing's tumor, craniopharyngioma, ependymoma, medulloblastoma, hemangioblastoma, medulloblastoma, melanoma, mesothelioma, neuroblastoma, neurofibroma, pinealoma, retinoblastoma, retinoblastoma, sarcoma (including angiosarcoma, chondrosarcoma, endothelial sarcoma, fibrosarcoma, gliosarcoma, leiomyosarcoma, liposarcoma, lymphangioendothelial sarcoma, lymphangiosarcoma, melanoma, meningioma, myosarcoma, osteogenic sarcoma, osteosarcoma), seminoma, trachomas, Wilms' tumor and multiple myeloma.

Claim 29 (Previously Presented): The method of claim 23, wherein said cancer is selected from the group of prostate cancer, colon carcinoma, endometrial cancer, esophageal cancer, hepatocellular cancer, non-small-cell lung carcinoma, ovarian cancer, pancreas carcinoma, soft tissue cancer, melanoma, renal cancer, leukaemia, lymphoma, osteosarcoma, mesothelioma, myeloma multiple and bladder cancer.

Claim 30 (Previously Presented): A method for cancer treatment comprising the step of administering at least one oligonucleotide or its active derivative to a subject, wherein said at least one oligonucleotide or its active derivative inhibits the formation of metastases in said subject and said cancer is selected from the group consisting of prostate cancer, bladder carcinoma, colon cancer, endometrial cancer, hepatocellular carcinoma, leukemia, lymphoma, melanoma, non-small-cell lung cancer (NSCLC), ovarian cancer, pancreatic cancer or is selected from the group of melanoma, renal cancer, leukaemia, lymphoma, osteosarcoma, mesothelioma, myeloma multiple and bladder cancer.

Claim 31 (Previously Presented): The method of claim 30, wherein said oligonucleotide is an antisense oligonucleotide which inhibits the production of a transforming growth factor and/or interleukin 10.

Claim 32 (Previously Presented): The method of claim 31, wherein said transforming growth factor (TGF) is selected from the group consisting of TGF-beta 1, TGF-beta 2 and TGF-beta 3.

Claim 33 (Previously Presented): The method of claim 30, wherein said oligonucleotide is identified in the sequence listing under SEQ ID NO. 1 to 107 or is identified in examples 19 to 24.

Claim 34 (Previously Presented): An antisense-oligonucleotide or its active derivative, selected from the group consisting of IL-10 antisense oligonucleotides identified in the sequence listing under Seq. ID NO. 49 to 68 or identified in example 22.

Claim 35 (Previously Presented): A process of manufacturing an antisense oligonucleotide or its active derivative of claim 12, comprising the step of adding consecutive nucleosides and linker stepwise or cutting said oligonucleotide out of a longer oligonucleotide chain.

Claim 36 (Previously Presented): A process of manufacturing an antisense oligonucleotide or its active derivative by phosphate triester chemistry in which said nucleotide chain grows in 3' to 5' direction and each consecutive nucleotide is coupled to a first nucleotide that is covalently attached to a solid phase, comprising the steps of

- cleaving the 5' DMT protecting group of each consecutive nucleotide
- adding a consecutive nucleotide for chain prolongation,
- modifying phosphate groups,
- capping unreacted 5'-hydroxyl groups,
- cleaving said oligonucleotides from said solid support.

Claim 37 (Previously Presented): The process of claim 36, comprising the further step of working up the synthesis product.

Claim 38 (Previously Presented): A Pharmaceutical composition comprising an antisense oligonucleotide as identified in the sequence listing under Seq. ID NO 49 to 68 or as identified in example 22.

Claim 39 (Previously Presented): A method for cancer treatment comprising the step of administering a TGF-beta 2 antagonist to a subject, wherein said cancer is selected from the group consisting of colon cancer, prostate cancer, melanoma, endometrial cancer, bladder cancer, ovarian cancer, pancreas cancer and mesothelioma.

Claim 40 (Previously Presented): The method of claim 39, wherein said antagonist is selected from the group consisting of TGF-beta2 binding proteins, TGF-beta receptor related inhibitors, Smad inhibitors, TGF-beta2 binding peptides, TGF-beta antibodies, regulators of TGF-beta2 expression, TGF-beta2 antisense oligonucleotides and active derivatives thereof.

Claim 41 (Previously Presented): The method of claim 39, wherein said oligonucleotide is identified in the sequence listing under SEQ ID NO 22 to 48 or is identified in example 20, example 23 or example 24.

Claim 42 (Previously Presented): A method for cancer treatment comprising the step of administering a TGF-beta 2 antagonist to a subject, wherein said cancer is selected from the group consisting of colon cancer, prostate cancer, melanoma, endometrial cancer, bladder cancer, ovarian cancer, pancreas cancer and mesothelioma.

Claim 43 (Previously Presented): A method for cancer treatment comprising the step of administering at least one oligonucleotide or its active derivative to a subject, wherein said at least one oligonucleotide or its active derivative treats metastases of said tumor.

Claim 44 (Previously Presented): A method for cancer metastase treatment comprising the step of administering at least one oligonucleotide or its active derivative to a subject, wherein said cancer is selected from the group consisting of colon cancer, prostate cancer, melanoma,

bladder cancer, endometrial cancer, esophageal cancer, hepatocellular cancer, non-small-cell lung cancer, ovarian cancer, osteosarcoma, mesothelioma, renal cancer, myeloma multiple, pancreas carcinoma, leukaemia, lymphoma and soft tissue cancer.

Claim 45 (Previously Presented): The method of claim 44, wherein said at least one antisense oligonucleotide is identified in the sequence listing under SEQ ID NO 49 to 69 or is identified in example 22.